Abstract Submitted to the
International Conference on Strongly Correlated Electron Systems
University of Michigan, Ann Arbor
August 6-10, 2001

Non-Stoner Continuum in the Double Exchange Model

T. A. Kaplan, S. D. Mahanti, Y.-S. Su
Michigan State University, East Lansing, MI 48824

Exact diagonalization studies of the double exchange model indicate the existence of continuum states in the single-spin-flip channel that overlap the magnons at very low energies ($\approx 10^{-2}$eV)and extend to high energies ($\approx$ eV). This picture differs dramatically from the prevalent view, where there are the magnons, plus the Stoner continuum at the high energy scale, with nothing in between. The relevance of these new continuum states to inelastic neutron scattering and optical properties is discussed.